

Serial Number: 09/183,672A

ENTERED

#5

☐

Changed a file from non-ASCII to ASCII

☐

Changed the margins in cases where the sequence text was "wrapped" down to the next line.

☐

Edited a format error in the Current Application Data section, specifically:

☐Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other \_\_\_\_\_☐

Added the mandatory heading and subheadings for "Current Application Data".

☐

Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.

☐

Changed the spelling of a mandatory field (the headings or subheadings), specifically:

☐

Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were:

☐

Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

☐

Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.

☐

Inserted colons after headings/subheadings. Headings edited included:

☐

Deleted extra, invalid, headings used by an applicant, specifically:

☐Deleted: ☐ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file;  
☐ page numbers throughout text; ☐ other invalid text, such as \_\_\_\_\_☐

Inserted mandatory headings, specifically: \_\_\_\_\_

☐

Corrected an obvious error in the response, specifically:

☐

Edited identifiers where upper case is used but lower case is required, or vice versa.

☐

Corrected an error in the Number of Sequences field, specifically:

☐

A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.

☐Deleted *ending* stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: \_\_\_\_\_☒

Other:

Corrected misaligned amino acid numbering.  
Segs. 378, 525.

\*Examiner: ~~The above corrections must be communicated to the applicant in the first Office Action.~~ DO NOT send a copy of this form.

3/1/95

1644

RAW SEQUENCE LISTING                      DATE: 09/11/2000  
 PATENT APPLICATION: US/09/483,672A        TIME: 10:24:17

Input Set : A:\Pto.amc  
 Output Set: N:\CRF3\09112000\I483672A.raw

3 <110> APPLICANT: Xu, Jiangchun  
 4        Dillon, Davin C.  
 5        Mitcham, Jennifer L.  
 6        Harlocker, Susan Louise  
 7        Jiang Yuqui  
 8        Reed, Steven G.  
 9        Kalos, Michael D.  
 10       Fanger, Gary R.  
 11       Retter, Marc W.  
 12       Solk, John A.  
 13       Day, Craig H.  
 14       Skeiky, Yasir A.W.  
 15       Wang, Aijun  
 16       Meagher, Madeleine  
 18 <120> TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THERAPY AND  
 19        DIAGNOSIS OF PROSTATE CANCER  
 21 <130> FILE REFERENCE: 210121.42711C11  
 C--> 23 <140> CURRENT APPLICATION NUMBER: US/09/483,672A  
 24 <141> CURRENT FILING DATE: 2000-01-14  
 26 <160> NUMBER OF SEQ ID NOS: 590  
 28 <170> SOFTWARE: FastSEQ for Windows Version 3.0  
 30 <210> SEQ ID NO: 1  
 31 <211> LENGTH: 814  
 32 <212> TYPE: DNA  
 33 <213> ORGANISM: Homo sapien  
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 37 <222> LOCATION: (1)...(814)  
 38 <223> OTHER INFORMATION: n = A,T,C or G  
 40 <400> SEQUENCE: 1  
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 42        atcaaatctg agggttgtct ggaggacttc aatacacctc ccccatagtg gaatcagctt        120  
 43        ccaggggggtc cagtcctctct ccttacttca tccccatccc atgccaaaagg aagaccctcc        180  
 44        ctccctgggtc cacagccttc tctaggcttc ccagtgcttc caggacagag tgggttatgt        240  
 45        tttcagctcc atccttgtctg tgagtgtctg gtgcgttggt cctccagctt ctgctcagtg        300  
 46        cttcatggac agtgtccagc acatgtcact ctccactctc toagtgtgga tccactagtt        360  
 47        ctagagcggc cggccacgcg gtggagctcc agcttttgtt ccttttagtg agggttaatt        420  
 48        gcgcgcttgg cgtaatcatg gtcataactg tttcctgtgt gaaattgtta tccgctcaca        480  
 49        attccacaca acatacgagc cggaagcata aagtgtaaag cctgggggtgc ctaatgagtg        540  
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 W--> 51        tgccagctgc attaatgaat cggccaacgc ncgggggaaa gcggtttgcg ttttgggggc        660  
 W--> 52        tcttccgctt ctgcctcact nantctgcg ctccggtcntt cggctgcggg gaacgggtatc        720  
 W--> 53        actcctcaaa ggnngtatta cggttatccn naaatcnngg gatacccnng aaaaaanttt        780  
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 56 <210> SEQ ID NO: 2  
 57 <211> LENGTH: 816  
 58 <212> TYPE: DNA

see P. 5

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Input Set : A:\Pto.amc  
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66 <400> SEQUENCE: 2
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68 ttcatggctg ttggagcaat agaaccaccag ttctacgagc tgctgatcaa aggacttgga      120
69 cttaaagtctg atgaacttcc caatcagatg agcatggatg attggccaga aatgaagaag      180
70 aagtttgacg atgtatttgc aaagaagacg aaggcagagt ggtgtcaaat ctttgacggc      240
71 acagatgcct gtgtgactcc ggttctgact tttagaggag ttgttcatca tgatcacaac      300
72 aaggacggg gctcgtttat caccagttag gagcaggacg tgagcccccg ccttgacact      360
73 ctgctgttaa acaccccagc catcccttct ttcaaaaggg atccactagt tctagaagcg      420
74 gccgccaccg cggtaggagc ccagcttttg ttccctttag tgagggttaa ttgcgcgctt      480
75 ggcgtaatca tggatcatagc tgtttcctgt gtgaaattgt tatccgctca caattccccc      540
W--> 76 aacatacgag ccggaacata aagtgttaag cctgggggtgc ctaatgantg agctaactcn      600
W--> 77 cattaattgc gttgcgctca ctgcccgctt tccagtcggg aaaactgtcg tgccactgcn      660
W--> 78 ttantgaatc ngccaccccc cgggaaaagg cggttgcntt ttgggcctct tccgctttcc      720
W--> 79 tcgtcattg atcctngcnc ccggtcttcg gctgcggnga acggttcact cctcaaaggc      780
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94 tcctgctcct cactgggtgat aaacgagccc cgttccttgt tggatcatg atgaacaacc      120
95 tcctcaaaag tcagaaccgg agtcacacag gcattctgtc cgtcaaatg ttgacaccac      180
96 tcgtccttcg tcttctttgc aaatacatct gcaaaactct tcttcatttc tggccaatca      240
W--> 97 tccatgctca tctgattggg aagttcatca gactttagtc canntcctt gatcagcagc      300
98 tcgtagaact ggggttctat tgctccaaca gccatgaatt ccccatctgc tgtcctgtaa      360
99 gtcgtataga aagggtgtcc accatccaac atgtttctgt ctcgaggggg ggcgggttac      420
W--> 100 ccaattcgcc ctatantgag tegtattacg cgcgtcact ggccgctcgt ttacaacgtc      480
101 gtgactggga aaacctggg cgttaccac ttaatcgctt tgcagcacat ccccctttcg      540
W--> 102 ccagctgggc gtaatanca aaaggcccg accgatcgcc cttccaacag ttgcgcacct      600
W--> 103 gaatgggnaa atgggacccc cctgttaccc cgcattnaac ccccgcnagg tttngttgtt      660
W--> 104 acccccacnt nnaccgctta cactttgcca gcgccttanc gcccgctccc tttncccttt      720
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108 <211> LENGTH: 828
109 <212> TYPE: DNA
110 <213> ORGANISM: Homo sapien
112 <220> FEATURE:
113 <221> NAME/KEY: misc_feature
114 <222> LOCATION: (1)...(828)

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Input Set : A:\Pto.amc  
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115 <223> OTHER INFORMATION: n = A,T,C or G
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119 aatgggcaga cagaggtgta tgccaatgtt tctgaaatgg gtataatttc gtcctctcct      120
120 tcggaacact ggcgtgtctct gaagacttct cgtcagttt cagtggaggac acacacaaaag      180
121 acgtgggtga ccatgtttgt tgtggggtgc agagatggga ggggtggggc ccaccctgga      240
122 agagtggaca gtgacacaaag gtggacactc tctacagatc actgaggata agctggagcc      300
W--> 123 acaatgcatg aggcacacac acagcaagga tgacnctgta aacatagccc acgtgtcct      360
W--> 124 gngggcactg ggaagcctan atnaggccgt gagcanaaag aaggggagga tccactagtt      420
W--> 125 ctanagcggc cgccaccgcg gtgganctcc ancttttgtt ccttttagtg aggggttaatt      480
W--> 126 gcgcgcttgg cntaatcatg gtcatanctn tttcctgtgt gaaattgtta tccgctcaca      540
W--> 127 attccacaca acatacganc cggaacata aantgtaaac ctggggtgcc taatgantga      600
W--> 128 ctaactcaca ttaattgctg tgcgctcact gcccgcttcc caatcnggaa acctgtcttg      660
W--> 129 ccncttgcac tnatgaatcn gccaaccccc ggggaaaagc gtttgcgttt tgggcgctct      720
W--> 130 tccgcttcct cnetcantta ntccctncnc tcggtcattc cggtgcngc aaaccggttc      780
W--> 131 accnctccca aaggggggtat tccggtttcc ccnaatccgg gganance      828
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134 <211> LENGTH: 834
135 <212> TYPE: DNA
136 <213> ORGANISM: Homo sapien
138 <220> FEATURE:
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140 <222> LOCATION: (1)...(834)
141 <223> OTHER INFORMATION: n = A,T,C or G
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145 agtttttaatt gcatccaaaag tactaacaaa aactctagca atcaagaatg gcagcatgtt      120
146 attttataac aatcaacacc tgtggctttt aaaatttggt tttcataaga taatttatac      180
147 tgaagtaaat ctagccatgc ttttaaaaaa tgcttttagt cactccaagc ttggcagtta      240
148 acatttggca taaacaataa taaaacaatc acaatttaat aaataacaaa tacaacattg      300
149 taggccataa tcatacacag tataaggaaa aggtggtagt gttgagtaag cagttattag      360
150 aatagaatac cttggcctct atgcaaatat gtctagacac tttgattcac tcagccctga      420
151 catteagttt tcaaagtagg agacaggttc tacagtatca ttttacagtt tccaacacat      480
152 tgaaaacaag tagaaaatga tgagttgatt tttattaatg cattacatcc tcaagagtta      540
153 tcaccaaccc ctcagttata aaaaattttc aagttatatt agtcataata cttggtgtgc      600
154 ttatttttaa ttagtgctaa atggattaag tgaagacaac aatgggtccc taatgtgatt      660
W--> 155 gatattggtc atttttacca gcttctaaat ctnaacttcc aggcctttga actggaacat      720
W--> 156 tgnatnacag tgttccanag ttncaaccta ctggaacatt acagtgtgct tgattcaaaa      780
W--> 157 tgttatatttg ttaaaaatta aattttaacc tgggtgaaaa ataatttgaa atna      834
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160 <211> LENGTH: 818
161 <212> TYPE: DNA
162 <213> ORGANISM: Homo sapien
164 <220> FEATURE:
165 <221> NAME/KEY: misc_feature
166 <222> LOCATION: (1)...(818)
167 <223> OTHER INFORMATION: n = A,T,C or G
169 <400> SEQUENCE: 6
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Input Set : A:\Pto.amc  
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171 aaccacatct acaaaatgcc agtatcaggg ggcggcttcg aagccaaagt gatgtttgga 120
172 tgtaaaagtga aatattagtt ggcggatgaa gcagatagtg aggaaaagtg agccaataat 180
173 gacgtgaagt ccgtggaagc ctgtggctac aaaaaatggt gagccgtaga tgccgtcggg 240
174 aatggtgaag ggagactcga agtactctga ggcttgtagg agggtaaaat agagaccag 300
175 taaaattgta ataagcagtg cttgaattat ttggtttcgg ttgttttcta ttagactatg 360
176 gtgagctcag gtgattgata ctactgatgc gagtaatacg gatgtgttta ggagtgggac 420
177 ttctagggga tttagcgggg tgatgcctgt tgggggccag tgcctccta gttggggggt 480
178 aggggctagg ctggagtgtt aaaaggctca gaaaaatcct gcgaagaaaa aaacttctga 540
179 ggtaataaat aggattatcc cgtatcgaag gcctttttgg acagggtggtg tgtggtggcc 600
180 ttggtatgtg ctttctcgtg ttacatcgcg ccatcattgg tatatggtta gtgtgttggg 660
W--> 181 ttantanggc ctantatgaa gaacttttgg antggaatta aatcaatngc ttggccggaa 720
W--> 182 gtcattanga nggctnaaaa ggcctctgta ngggtctggg ctnggtttta cccnaccat 780
W--> 183 ggaatncncc ccccggaana ntgnatccct attcttaa 818
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186 <211> LENGTH: 817
187 <212> TYPE: DNA
188 <213> ORGANISM: Homo sapien
190 <220> FEATURE:
191 <221> NAME/KEY: misc_feature
192 <222> LOCATION: (1)...(817)
193 <223> OTHER INFORMATION: n = A,T,C or G
195 <400> SEQUENCE: 7
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198 ggtttgctcc acagatttca gagcattgac cgtagtatac ccccggtcgt gtagcgggtga 180
199 aagtgttttg gtttagacgt ccgggaattg catctgtttt taagcctaata gtggggacag 240
W--> 200 ctcatgagtg caagacgtct tgtgatgtaa ttattatacn aatgggggct tcaatcggga 300
201 gtactactcg attgtcaacg tcaaggagtc gcaggtcgcc tggttctagg aataatgggg 360
202 gaagtatgta ggaattgaag attaatccgc cgtagtcggt gttctcctag gttcaatacc 420
203 attggtggcc aattgatttg atggtaaggg gagggatcgt tgaactcgtc tgttatgtaa 480
W--> 204 aggatncctt ngggatggga aggcnatnaa ggactangga tnaatggcgg gcangatatt 540
W--> 205 tcaaacngtc tctanttcct gaaacgtctg aaatgttaat aanaattaan tttngttatt 600
W--> 206 gaatnttngg gaaaagggct tacaggacta gaaaccaaata angaaaanta atnntaangg 660
W--> 207 cnttatcntn aaaggtnata accnctccta tnatccacc caatngnatt cccacnenn 720
W--> 208 acnattggat nccccanttc canaaanggc cncceccggg tgnannccnc cttttgttcc 780
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212 <211> LENGTH: 799
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214 <213> ORGANISM: Homo sapien
216 <220> FEATURE:
217 <221> NAME/KEY: misc_feature
218 <222> LOCATION: (1)...(799)
219 <223> OTHER INFORMATION: n = A,T,C or G
221 <400> SEQUENCE: 8
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223 cataaggaga actttctgct ggcacgcgct agggacaagc gggagagcga ctccgagcgt 120
224 ctgaagcgca cgtcccagaa ggtggacttg gcaactgaaac agctgggaca catccgcgag 180
225 tacgaacagc gcctgaaagt gctggagcgg gaggtccagc agtgtagccg cgtcctgggg 240

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W--> 228 gggattttgct cctanantaa ggctcatctg ggctcggcc cccccacctg gttggccttg 420
W--> 229 tctttgangt gagecccatg tccatctggg ccactgtcng gaccaccttt ngggagtgtt 480
W--> 230 ctccttacaa ccacannatg cccggctcct cccggaaacc antccance tngaaaggat 540
W--> 231 caagnccctgn atccactnnt nctanaaccg gccnccnccg cngtggaaacc cnccttntgt 600
W--> 232 tccttttctnt tnagggttaa tnnccgcttg gccttnccan ngctctnccn ntttccnnt 660
W--> 233 gttnaaattg ttangcncce nccnntccen cnnnnnnan cccgaccenn annttnnann 720
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W--> 235 ctttccctct nggganncg 799
237 <210> SEQ ID NO: 9
238 <211> LENGTH: 801
239 <212> TYPE: DNA
240 <213> ORGANISM: Homo sapien
242 <220> FEATURE:
243 <221> NAME/KEY: misc_feature
244 <222> LOCATION: (1)...(801)
245 <223> OTHER INFORMATION: n = A,T,C or G
247 <400> SEQUENCE: 9
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250 caaggacaag gccaccaggt gcgggggcgc aagccacat gatccttact ctatgagcaa 180
W--> 251 aatccctgtt gggggttctt ccttgaagtc cgccancagg gctcagtctt tggaccang 240
W--> 252 caggtcatgg ggttgtnnc caactggggg cncacacgca aaanggcna gggcctcngn 300
W--> 253 caccatccc angacgggc tacaactnctg gacctccnc tccaccactt tcatgcctg 360
W--> 254 ttentaccgc cgnatntgtc ccanctgttt cngtgccnac tccancttct nggacgtgcg 420
W--> 255 ctacatacgc ccggantcnc nctcccgctt tgcctctatc cactnccan caacaaattt 480
W--> 256 cncctantg caccnattcc cacttttnc agntttccnc nncngcttc cttntaaaag 540
W--> 257 ggttgancec cggaaaatnc cccaaagggg gggggccngg taccacactn cccctnata 600
W--> 258 gctgaantcc ccatnaccnn gntcnatgg anccntccnt ttaannaen tctnaactt 660
W--> 259 gggaaanacc ctcgncctn ccccnntaa tccncccttg cnangnncnt ccccnntcc 720
W--> 260 nccnnntng gcntntnann cnaaaaaggc cnnnnancaa tctctnnen cctcanttcg 780
W--> 261 ccancctcg aaatcgccn c 801
263 <210> SEQ ID NO: 10
264 <211> LENGTH: 789
265 <212> TYPE: DNA
266 <213> ORGANISM: Homo sapien
268 <220> FEATURE:
269 <221> NAME/KEY: misc_feature
270 <222> LOCATION: (1)...(789)
271 <223> OTHER INFORMATION: n = A,T,C or G
273 <400> SEQUENCE: 10
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275 acagtgtggc cgtggtgaca gcttcagcgc cctcaccgg gttcaccttc tcagccctgc 120
276 agatectgcc ctacacactg gcctccctct accaccggga gaagcagggt ttctgcccc 180
277 aataccgagg ggacactgga ggtgctagca gtgaggacag cctgatgacc agcttccctg 240
278 caggccctaa gcctggagct ccttcccta atggacacgt ggggtctgga ggcagtggcc 300
279 tgcctccacc tccaccgcgc ctctgcgggg cctctgcctg tgatgtctcc gtacgtgtgg 360
W--> 280 tgggtgggtga gccaccgan gccagggtgg ttccgggcgc gggcatctgc ctggacctcg 420

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**Please Note:**

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

← F.Y.I.

VERIFICATION SUMMARY                      DATE: 09/11/2000  
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Input Set : A:\Pto.amc  
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L:23 M:270 C: Current Application Number differs, Wrong Format  
L:50 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1  
L:51 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1  
L:52 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1  
L:53 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1  
L:54 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1  
L:76 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2  
L:77 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2  
L:78 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2  
L:79 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2  
L:80 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2  
L:97 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3  
L:100 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3  
L:102 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3  
L:103 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3  
L:104 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3  
L:105 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3  
L:123 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4  
L:124 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4  
L:125 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4  
L:126 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4  
L:127 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4  
L:128 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4  
L:129 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4  
L:130 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4  
L:131 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4  
L:155 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5  
L:156 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5  
L:157 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5  
L:181 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6  
L:182 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6  
L:183 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6  
L:200 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7  
L:204 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7  
L:205 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7  
L:206 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7  
L:207 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7  
L:208 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7  
L:209 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7  
L:226 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8  
L:227 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8  
L:228 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8  
L:229 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8  
L:230 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8  
L:231 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8  
L:232 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8  
L:233 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8  
L:234 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8

VERIFICATION SUMMARY                      DATE: 09/11/2000  
PATENT APPLICATION:    US/09/483,672A              TIME: 10:24:18

Input Set : A:\Pto.amc  
Output Set: N:\CRF3\09112000\I483672A.raw

L:235 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8  
L:249 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9  
L:251 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9  
L:698 M:283 W: Missing Blank Line separator, <210> field identifier  
L:1467 M:283 W: Missing Blank Line separator, <400> field identifier  
L:10018 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:502  
L:10018 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:502  
L:10018 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:502  
L:10018 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:502  
L:10018 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:502  
L:10019 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:502  
L:10019 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:502  
L:10019 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:502  
L:10019 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:502  
M:340 Repeated in SeqNo=502  
L:10020 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:502  
L:10020 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:502  
L:10020 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:502  
L:10020 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:502  
L:10021 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:502  
L:10021 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:502  
L:10021 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:502  
L:10021 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:502  
L:10023 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:502  
L:10023 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:502  
L:10023 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:502  
L:10023 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:502  
L:10031 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:503  
L:10031 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:503  
L:10031 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:503  
L:10031 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:503  
L:10031 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:503  
L:10032 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:503  
L:10032 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:503  
L:10032 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:503  
L:10032 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:503  
M:340 Repeated in SeqNo=503  
L:10033 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:503  
L:10033 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:503  
L:10033 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:503  
L:10033 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:503  
L:10035 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:503  
L:10035 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:503  
L:10035 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:503  
L:10035 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:503  
L:10036 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:503  
L:10036 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:503  
L:10036 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:503  
L:10036 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:503



VERIFICATION SUMMARY                      DATE: 09/11/2000  
PATENT APPLICATION:    US/09/483,672A        TIME: 10:24:18

Input Set : A:\Pto.amc  
Output Set: N:\CRF3\09112000\I483672A.raw

L:10037 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:503  
L:10037 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:503  
L:10037 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:503  
L:10037 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:503  
L:10107 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:508  
L:10107 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:508  
L:10107 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:508  
L:10107 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:508  
L:10107 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:508

Input Set : A:\42711c11.app  
Output Set: N:\CRF3\09112000\I483672A.raw

Does Not Comply  
Corrected Diskette Needed  
These errors have  
been edited

```

7200 <210> SEQ ID NO: 378
7201 <211> LENGTH: 1719
7202 <212> TYPE: PRT
7203 <213> ORGANISM: Homo sapien
7205 <400> SEQUENCE: 378
7206 Met Val Val Glu Val Asp Ser Met Pro Ala Ala Ser Ser Val Lys Lys
7207 1 5 10 15
7208 Pro Phe Gly Leu Arg Ser Lys Met Gly Lys Trp Cys Cys Arg Cys Phe
7209 20 25 30
7210 Pro Cys Cys Arg Glu Ser Gly Lys Ser Asn Val Gly Thr Ser Gly Asp
7211 35 40 45
7212 His Asp Asp Ser Ala Met Lys Thr Leu Arg Ser Lys Met Gly Lys Trp
7213 50 55 60
7214 Cys Arg His Cys Phe Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn Val
7215 65 70 75 80
7216 Gly Ala Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr Leu Arg Asn
7217 85 90 95
7218 Lys Met Gly Lys Trp Cys Cys His Cys Phe Pro Cys Cys Arg Gly Ser
7219 100 105 110
7220 Gly Lys Ser Lys Val Gly Ala Trp Gly Asp Tyr Asp Asp Ser Ala Phe
7221 115 120 125
7222 Met Glu Pro Arg Tyr His Val Arg Gly Glu Asp Leu Asp Lys Leu His

```

RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/09/483,672A

DATE: 09/11/2000  
 TIME: 15:29:38

Input Set : A:\42711c11.app  
 Output Set: N:\CRF3\09112000\I483672A.raw

```

7223      130      135      140
7224 Arg Ala Ala Trp Trp Gly Lys Val Pro Arg Lys Asp Leu Ile Val Met
7225 145      150      155      160
7226 Leu Arg Asp Thr Asp Val Asn Lys Lys Asp Lys Gln Lys Arg Thr Ala
7227      165      170      175
7228 Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu Val Val Lys Leu Leu
7229      180      185      190
7230 Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp Asn Lys Lys Arg Thr
7231 195      200      205
7232 Ala Leu Ile Lys Ala Val Gln Cys Gln Glu Asp Glu Cys Ala Leu Met
7233 210      215      220
7234 Leu Leu Glu His Gly Thr Asp Pro Asn Ile Pro Asp Glu Tyr Gly Asn
7235 225      230      235
7236 Thr Thr Leu His Tyr Ala Ile Tyr Asn Glu Asp Lys Leu Met Ala Lys
7237      245      250      255
7238 Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser Lys Asn Lys His Gly
7239 260      265      270
7240 Leu Thr Pro Leu Leu Leu Gly Val His Glu Gln Lys Gln Gln Val Val
7241 275      280      285
7242 Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu Asn Ala Leu Asp Arg Tyr
7243 290      295      300
7244 Gly Arg Thr Ala Leu Ile Leu Ala Val Cys Cys Gly Ser Ala Ser Ile
7245 305      310      315
7246 Val Ser Leu Leu Leu Glu Gln Asn Ile Asp Val Ser Ser Gln Asp Leu
7247      325      330      335
7248 Ser Gly Gln Thr Ala Arg Glu Tyr Ala Val Ser Ser His His His Val
7249      340      345      350
7250 Ile Cys Gln Leu Leu Ser Asp Tyr Lys Glu Lys Gln Met Leu Lys Ile
7251 355      360      365
7252 Ser Ser Glu Asn Ser Asn Pro Glu Asn Val Ser Arg Thr Arg Asn Lys
7253 370      375      380
7254 Pro Arg Thr His Met Val Val Glu Val Asp Ser Met Pro Ala Ala Ser
7255 385      390      395
7256 Ser Val Lys Lys Pro Phe Gly Leu Arg Ser Lys Met Gly Lys Trp Cys
7257      405      410      415
7258 Cys Arg Cys Phe Pro Cys Cys Arg Glu Ser Gly Lys Ser Asn Val Gly
7259      420      425      430
7260 Thr Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr Leu Arg Ser Lys
7261      435      440      445
7262 Met Gly Lys Trp Cys Arg His Cys Phe Pro Cys Cys Arg Gly Ser Gly
7263      450      455      460
7264 Lys Ser Asn Val Gly Ala Ser Gly Asp His Asp Asp Ser Ala Met Lys
7265 465      470      475
7266 Thr Leu Arg Asn Lys Met Gly Lys Trp Cys Cys His Cys Phe Pro Cys
7267      485      490      495
7268 Cys Arg Gly Ser Gly Lys Ser Lys Val Gly Ala Trp Gly Asp Tyr Asp
7269      500      505      510
7270 Asp Ser Ala Phe Met Glu Pro Arg Tyr His Val Arg Gly Glu Asp Leu
7271      515      520      525

```

RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/09/483,672A  
 DATE: 09/11/2000  
 TIME: 15:29:38

Input Set : A:\42711c11.app  
 Output Set: N:\CRF3\09112000\I483672A.raw

```

7272 Asp Lys Leu His Arg Ala Ala Trp Trp Gly Lys Val Pro Arg Lys Asp
7273      530      535      540
7274 Leu Ile Val Met Leu Arg Asp Thr Asp Val Asn Lys Lys Asp Lys Gln
7275      545      550      555      560
7276 Lys Arg Thr Ala Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu Val
7277      565      570      575
7278 Val Lys Leu Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp Asn
7279      580      585      590
7280 Lys Lys Arg Thr Ala Leu Ile Lys Ala Val Gln Cys Gln Glu Asp Glu
7281      595      600      605
7282 Cys Ala Leu Met Leu Leu Glu His Gly Thr Asp Pro Asn Ile Pro Asp
7283      610      615      620
7284 Glu Tyr Gly Asn Thr Thr Leu His Tyr Ala Ile Tyr Asn Glu Asp Lys
7285      625      630      635      640
7286 Leu Met Ala Lys Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser Lys
7287      645      650      655
7288 Asn Lys His Gly Leu Thr Pro Leu Leu Leu Gly Val His Glu Gln Lys
7289      660      665      670
7290 Gln Gln Val Val Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu Asn Ala
7291      675      680      685
7292 Leu Asp Arg Tyr Gly Arg Thr Ala Leu Ile Leu Ala Val Cys Cys Gly
7293      690      695      700
7294 Ser Ala Ser Ile Val Ser Leu Leu Leu Glu Gln Asn Ile Asp Val Ser
7295      705      710      715      720
7296 Ser Gln Asp Leu Ser Gly Gln Thr Ala Arg Glu Tyr Ala Val Ser Ser
7297      725      730      735
7298 His His His Val Ile Cys Gln Leu Leu Ser Asp Tyr Lys Glu Lys Gln
7299      740      745      750
7300 Met Leu Lys Ile Ser Ser Glu Asn Ser Asn Pro Glu Gln Asp Leu Lys
7301      755      760      765
7302 Leu Thr Ser Glu Glu Glu Ser Gln Arg Phe Lys Gly Ser Glu Asn Ser
7303      770      775      780
7304 Gln Pro Glu Lys Met Ser Gln Glu Pro Glu Ile Asn Lys Asp Gly Asp
7305      785      790      795      800
7306 Arg Glu Val Glu Glu Glu Met Lys Lys His Glu Ser Asn Asn Val Gly
7307      805      810      815
7308 Leu Leu Glu Asn Leu Thr Asn Gly Val Thr Ala Gly Asn Gly Asp Asn
7309      820      825      830
7310 Gly Leu Ile Pro Gln Arg Lys Ser Arg Thr Pro Glu Asn Gln Gln Phe
7311      835      840      845
7312 Pro Asp Asn Glu Ser Glu Glu Tyr His Arg Ile Cys Glu Leu Val Ser
7313      850      855      860
7314 Asp Tyr Lys Glu Lys Gln Met Pro Lys Tyr Ser Ser Glu Asn Ser Asn
7315      865      870      875      880
7316 Pro Glu Gln Asp Leu Lys Leu Thr Ser Glu Glu Glu Ser Gln Arg Leu
7317      885      890      895
7318 Glu Gly Ser Glu Asn Gly Gln Pro Glu Leu Glu Asn Phe Met Ala Ile
7319      900      905      910
7320 Glu Glu Met Lys Lys His Gly Ser Thr His Val Gly Phe Pro Glu Asn

```

RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/09/483,672A DATE: 09/11/2000  
 TIME: 15:29:38

Input Set : A:\42711c11.app  
 Output Set: N:\CRF3\09112000\I483672A.raw

```

7321          915          920          925
7322 Leu Thr Asn Gly Ala Thr Ala Gly Asn Gly Asp Asp Gly Leu Ile Pro
7323          930          935          940
7324 Pro Arg Lys Ser Arg Thr Pro Glu Ser Gln Gln Phe Pro Asp Thr Glu
7325          945          950          955          960
7326 Asn Glu Glu Tyr His Ser Asp Glu Gln Asn Asp Thr Gln Lys Gln Phe
7327          965          970          975
7328 Cys Glu Glu Gln Asn Thr Gly Ile Leu His Asp Glu Ile Leu Ile His
7329          980          985          990
7330 Glu Glu Lys Gln Ile Glu Val Val Glu Lys Met Asn Ser Glu Leu Ser
7331          995          1000          1005
7332 Leu Ser Cys Lys Lys Glu Lys Asp Ile Leu His Glu Asn Ser Thr Leu
7333          1010          1015          1020
7334 Arg Glu Glu Ile Ala Met Leu Arg Leu Glu Leu Asp Thr Met Lys His
E--> 7335          1025          1030          1035          104
7336 Gln Ser Gln Leu Pro Arg Thr His Met Val Val Glu Val Asp Ser Met
7337          1045          1050          1055
7338 Pro Ala Ala Ser Ser Val Lys Lys Pro Phe Gly Leu Arg Ser Lys Met
7339          1060          1065          1070
7340 Gly Lys Trp Cys Cys Arg Cys Phe Pro Cys Cys Arg Glu Ser Gly Lys
7341          1075          1080          1085
7342 Ser Asn Val Gly Thr Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr
7343          1090          1095          1100
7344 Leu Arg Ser Lys Met Gly Lys Trp Cys Arg His Cys Phe Pro Cys Cys
E--> 7345          1105          1110          1115          112
7346 Arg Gly Ser Gly Lys Ser Asn Val Gly Ala Ser Gly Asp His Asp Asp
7347          1125          1130          1135
7348 Ser Ala Met Lys Thr Leu Arg Asn Lys Met Gly Lys Trp Cys Cys His
7349          1140          1145          1150
7350 Cys Phe Pro Cys Cys Arg Gly Ser Gly Lys Ser Lys Val Gly Ala Trp
7351          1155          1160          1165
7352 Gly Asp Tyr Asp Asp Ser Ala Phe Met Glu Pro Arg Tyr His Val Arg
7353          1170          1175          1180
7354 Gly Glu Asp Leu Asp Lys Leu His Arg Ala Ala Trp Trp Gly Lys Val
E--> 7355          1185          1190          1195          120
7356 Pro Arg Lys Asp Leu Ile Val Met Leu Arg Asp Thr Asp Val Asn Lys
7357          1205          1210          1215
7358 Lys Asp Lys Gln Lys Arg Thr Ala Leu His Leu Ala Ser Ala Asn Gly
7359          1220          1225          1230
7360 Asn Ser Glu Val Val Lys Leu Leu Asp Arg Arg Cys Gln Leu Asn
7361          1235          1240          1245
7362 Val Leu Asp Asn Lys Lys Arg Thr Ala Leu Ile Lys Ala Val Gln Cys
7363          1250          1255          1260
7364 Gln Glu Asp Glu Cys Ala Leu Met Leu Leu Glu His Gly Thr Asp Pro
E--> 7365          1265          1270          1275          128
7366 Asn Ile Pro Asp Glu Tyr Gly Asn Thr Thr Leu His Tyr Ala Ile Tyr
7367          1285          1290          1295
7368 Asn Glu Asp Lys Leu Met Ala Lys Ala Leu Leu Tyr Gly Ala Asp
7369          1300          1305          1310

```

Invalid Amino  
 Acid Numbering.  
 Right side:  
 His 104 → 1040  
 Cys 112 → 1120  
 Val 120 → 1200  
 Pro 128 → 1280

RAW SEQUENCE LISTING                      DATE: 09/11/2000  
 PATENT APPLICATION: US/09/483,672A        TIME: 15:29:38

Input Set : A:\42711c11.app  
 Output Set: N:\CRF3\09112000\I483672A.raw

```

7370 Ile Glu Ser Lys Asn Lys His Gly Leu Thr Pro Leu Leu Leu Gly Val
7371           1315           1320           1325
7372 His Glu Gln Lys Gln Gln Val Val Lys Phe Leu Ile Lys Lys Lys Ala
7373           1330           1335           1340
7374 Asn Leu Asn Ala Leu Asp Arg Tyr Gly Arg Thr Ala Leu Ile Leu Ala
E--> 7375 1345           1350           1355           136
7376 Val Cys Cys Gly Ser Ala Ser Ile Val Ser Leu Leu Leu Glu Gln Asn
7377           1365           1370           1375
7378 Ile Asp Val Ser Ser Gln Asp Leu Ser Gly Gln Thr Ala Arg Glu Tyr
7379           1380           1385           1390
7380 Ala Val Ser Ser His His His Val Ile Cys Gln Leu Leu Ser Asp Tyr
7381           1395           1400           1405
7382 Lys Glu Lys Gln Met Leu Lys Ile Ser Ser Glu Asn Ser Asn Pro Glu
7383           1410           1415           1420
7384 Gln Asp Leu Lys Leu Thr Ser Glu Glu Glu Ser Gln Arg Phe Lys Gly
E--> 7385 1425           1430           1435           144
7386 Ser Glu Asn Ser Gln Pro Glu Lys Met Ser Gln Glu Pro Glu Ile Asn
7387           1445           1450           1455
7388 Lys Asp Gly Asp Arg Glu Val Glu Glu Glu Met Lys Lys His Glu Ser
7389           1460           1465           1470
7390 Asn Asn Val Gly Leu Leu Glu Asn Leu Thr Asn Gly Val Thr Ala Gly
7391           1475           1480           1485
7392 Asn Gly Asp Asn Gly Leu Ile Pro Gln Arg Lys Ser Arg Thr Pro Glu
7393           1490           1495           1500
7394 Asn Gln Gln Phe Pro Asp Asn Glu Ser Glu Glu Tyr His Arg Ile Cys
E--> 7395 1505           1510           1515           152
7396 Glu Leu Val Ser Asp Tyr Lys Glu Lys Gln Met Pro Lys Tyr Ser Ser
7397           1525           1530           1535
7398 Glu Asn Ser Asn Pro Glu Gln Asp Leu Lys Leu Thr Ser Glu Glu Glu
7399           1540           1545           1550
7400 Ser Gln Arg Leu Glu Gly Ser Glu Asn Gly Gln Pro Glu Lys Arg Ser
7401           1555           1560           1565
7402 Gln Glu Pro Glu Ile Asn Lys Asp Gly Asp Arg Glu Leu Glu Asn Phe
7403           1570           1575           1580
7404 Met Ala Ile Glu Glu Met Lys Lys His Gly Ser Thr His Val Gly Phe
E--> 7405 1585           1590           1595           160
7406 Pro Glu Asn Leu Thr Asn Gly Ala Thr Ala Gly Asn Gly Asp Asp Gly
7407           1605           1610           1615
7408 Leu Ile Pro Pro Arg Lys Ser Arg Thr Pro Glu Ser Gln Gln Phe Pro
7409           1620           1625           1630
7410 Asp Thr Glu Asn Glu Glu Tyr His Ser Asp Glu Gln Asn Asp Thr Gln
7411           1635           1640           1645
7412 Lys Gln Phe Cys Glu Glu Gln Asn Thr Gly Ile Leu His Asp Glu Ile
7413           1650           1655           1660
7414 Leu Ile His Glu Glu Lys Gln Ile Glu Val Val Glu Lys Met Asn Ser
E--> 7415 1665           1670           1675           168
7416 Glu Leu Ser Leu Ser Cys Lys Lys Glu Lys Asp Ile Leu His Glu Asn
7417           1685           1690           1695
7418 Ser Thr Leu Arg Glu Glu Ile Ala Met Leu Arg Leu Glu Leu Asp Thr

```

Same  
as  
previous  
page

RAW SEQUENCE LISTING                      DATE: 09/11/2000  
 PATENT APPLICATION:    US/09/483,672A        TIME: 15:29:38

Input Set : A:\42711c11.app  
 Output Set: N:\CRF3\09112000\I483672A.raw

```

7419                      1700                      1705                      1710
7420 Met Lys His Gln Ser Gln Leu
7421                      1715
10356 <210> SEQ ID NO: 525
10357 <211> LENGTH: 254
10358 <212> TYPE: PRT
10359 <213> ORGANISM: Homo sapien
10361 <400> SEQUENCE: 525
10362 Met Ala Thr Ala Gly Asn Pro Trp Gly Trp Phe Leu Gly Tyr Leu Ile
10363 1                      5                      10                      15
10364 Leu Gly Val Ala Gly Ser Leu Val Ser Gly Ser Cys Ser Gln Ile Ile
10365                      20                      25                      30
10366 Asn Gly Glu Asp Cys Ser Pro His Ser Gln Pro Trp Gln Ala Ala Leu
10367                      35                      40                      45
10368 Val Met Glu Asn Glu Leu Phe Cys Ser Gly Val Leu Val His Pro Gln
10369                      50                      55                      60
10370 Trp Val Leu Ser Ala Ala His Cys Phe Gln Asn Ser Tyr Thr Ile Gly
10371 65                      70                      75                      80
10372 Leu Gly Leu His Ser Leu Glu Ala Asp Gln Glu Pro Gly Ser Gln Met
10373                      85                      90                      95
10374 Val Glu Ala Ser Leu Ser Val Arg His Pro Glu Tyr Asn Arg Pro Leu
10375                      100                      105                      110
10376 Leu Ala Asn Asp Leu Met Leu Ile Lys Leu Asp Glu Ser Val Ser Glu
10377                      115                      120                      125
10378 Ser Asp Thr Ile Arg Ser Ile Ser Ile Ala Ser Gln Cys Pro Thr Ala
10379                      130                      135                      140
10380 Gly Asn Ser Cys Leu Val Ser Gly Trp Gly Leu Leu Ala Asn Gly Arg
10381 145                      150                      155                      160
10382 Met Pro Thr Val Leu Gln Cys Val Asn Val Ser Val Val Ser Glu Glu
10383                      165                      170                      175
10384 Val Cys Ser Lys Leu Tyr Asp Pro Leu Tyr His Pro Ser Met Phe Cys
10385                      180                      185                      190
10386 Ala Gly Gly Gly Gln Asp Gln Lys Asp Ser Cys Asn Gly Asp Ser Gly
10387                      195                      200                      205
10388 Gly Pro Leu Ile Cys Asn Gly Tyr Leu Gln Gly Leu Val Ser Phe Gly
10389                      210                      215                      220
10390 Lys Ala Pro Cys Gly Gln Val Gly Val Pro Gly Val Tyr Thr Asn Leu
10391 225                      230                      235                      240
10392 Cys Lys Phe Thr Glu Trp Ile Glu Lys Thr Val Gln Ala Ser
E--> 10393 245 250 → 250

```

*Invalid amino acid numbering*

VERIFICATION SUMMARY                      DATE: 09/11/2000  
PATENT APPLICATION:    US/09/483,672A            TIME: 15:29:40

Input Set : A:\42711c11.app  
Output Set: N:\CRF3\09112000\I483672A.raw

L:23 M:270 C: Current Application Number differs, Wrong Format  
L:50 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1  
L:51 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1  
L:52 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1  
L:53 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1  
L:54 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1  
L:76 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2  
L:77 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2  
L:78 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2  
L:79 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2  
L:80 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2  
L:97 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3  
L:100 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3  
L:102 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3  
L:103 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3  
L:104 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3  
L:105 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3  
L:123 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4  
L:124 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4  
L:125 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4  
L:126 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4  
L:127 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4  
L:128 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4  
L:129 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4  
L:130 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4  
L:131 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4  
L:155 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5  
L:156 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5  
L:157 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5  
L:181 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6  
L:182 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6  
L:183 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6  
L:200 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7  
L:204 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7  
L:205 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7  
L:206 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7  
L:207 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7  
L:208 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7  
L:209 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7  
L:226 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8  
L:227 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8  
L:228 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8  
L:229 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8  
L:230 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8  
L:231 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8  
L:232 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8  
L:233 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8  
L:234 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8



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PATENT APPLICATION:    US/09/483,672A                      TIME: 15:29:40

Input Set : A:\42711c11.app  
Output Set: N:\CRF3\09112000\I483672A.raw

L:235 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8  
L:249 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9  
L:251 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9  
L:698 M:283 W: Missing Blank Line separator, <210> field identifier  
L:1467 M:283 W: Missing Blank Line separator, <400> field identifier  
L:7335 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:378  
M:332 Repeated in SeqNo=378  
L:10018 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:502  
L:10018 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:502  
L:10018 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:502  
L:10018 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:502  
L:10018 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:502  
L:10019 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:502  
L:10019 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:502  
L:10019 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:502  
L:10019 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:502  
M:340 Repeated in SeqNo=502  
L:10020 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:502  
L:10020 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:502  
L:10020 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:502  
L:10020 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:502  
L:10021 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:502  
L:10021 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:502  
L:10021 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:502  
L:10021 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:502  
L:10021 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:502  
L:10021 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:502  
L:10021 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:502  
L:10021 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:502  
L:10023 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:502  
L:10023 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:502  
L:10023 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:502  
L:10023 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:502  
L:10031 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:503  
L:10031 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:503  
L:10031 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:503  
L:10031 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:503  
L:10031 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:503  
L:10032 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:503  
L:10032 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:503  
L:10032 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:503  
L:10032 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:503  
M:340 Repeated in SeqNo=503  
L:10033 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:503  
L:10033 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:503  
L:10033 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:503  
L:10033 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:503  
L:10035 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:503  
L:10035 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:503  
L:10035 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:503  
L:10035 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:503  
L:10036 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:503  
L:10036 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:503

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PATENT APPLICATION: US/09/483,672A        TIME: 15:29:40

Input Set : A:\42711c11.app  
Output Set: N:\CRF3\09112000\I483672A.raw

L:10036 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:503  
L:10036 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:503  
L:10037 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:503  
L:10037 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:503  
L:10037 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:503  
L:10037 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:503  
L:10107 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:508  
L:10107 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:508  
L:10107 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:508  
L:10107 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:508  
L:10107 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:508  
L:10393 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:525